17. *Rupture of Bladder not Immediately Fatal.*—The *Archives Gén.* for June, 1834, contains an example of this accident. The subject of the case was a man, thirty years of age, who in a quarrel was struck with the foot in the hypogastric region. Symptoms leading to suspicions of rupture of the bladder were manifested. On the introduction of the catheter but a small quantity of turbid urine was evacuated, and on pushing the point of the catheter in different directions, M. Dupuytren perceived that when directed towards the anterior-superior portion of the bladder, the instrument might be made to penetrate to an indefinite extent; and more urine was then evacuated. Leeches were applied to the pubic region, demulcent drinks in small quantities allowed, and rigid diet ordered. Under these measures the inflammation seemed to be circumscribed to the neighbourhood of the bladder, and the violence of the symptoms controlled. But about the sixth day the patient disobeyed the instructions respecting diet, and even drank wine, and on the seventh day he died. On examination there were found cellular bands, which formed a second sac, posterior to the bladder, and containing a turbid fluid, of an urinous odour, and mixed with albuminous flocculi. These was also a rupture of the bladder, two inches in extent, at its posterior portion. It was the opinion of M. Dupuytren and those who examined the subject, on witnessing the admirable efforts made by nature to supply the bladder, that the death of the patient was rather owing to his imprudence in diet than to the rupture of the bladder.

18. *Obstinate Constipation.*—An example of this, which lasted thirty-nine days, is recorded in *l'Abeille Belge.* After resisting a variety of purgatives, the constipation yielded on the thirty-ninth day, and from this period all the symptoms produced by it disappeared.

MATERIA MEDICA AND PHARMACY.

19. *Preparation of the Ioduret and Hydriodate of Iron.*—Every practitioner who has employed these valuable preparations must have had ample proof of their mutable qualities and of the readiness with which they become decomposed; the following directions by Dr. A. T. Thomson, for their preparation and preservation, will therefore be useful, especially to country physicians.

Precautions necessary in the preparation of the Ioduret and the Hydriodate.—One part of the iron wire should be rubbed in a porcelain or a Wedgwood's mortar, with about three or four parts of iodine, gradually adding distilled water, until fifteen parts of the fluid shall have been used: the whole is then to be introduced into a Florence flask, with an additional portion of iron wire, and of distilled water. This excess of iron is a matter of indifference in the preparation of the hydriodate; and, in that of the ioduret, it is necessary for preserving the combination from decomposition, during the evaporation of the solution. These materials are next to be boiled together, until the fluid acquire a pale greenish colour, when it should be filtered. This solution contains a hydriodate of the protoxide of iron; and, if the exact quantity of the iodine be previously ascertained, so as to enable us to procure the solution of a definite strength, it may be kept in this state for medicinal use. In general, however, the solution is evaporated to dryness; and for this purpose it may be poured into a clean flask, containing a piece of iron wire sufficiently long to reach from the bottom to the surface of the fluid, and the boiling should be continued until the bulk of the solution be reduced to one-third. It must then be filtered; after which the evaporation should be continued to dryness. It is necessary to break the flask as soon as the mass is cold, in order to obtain the solid ioduret, which should be immediately transferred to a dry bottle, fitted with an accurately ground stopper. The bottle should not hold more than two ounces of the preparation; for, when it is large and not full, the ioduret deliquesces nearly as rapidly as when it is exposed to the free action of the atmosphere. When the flask is broken and the ioduret bottled before the mass is cold, deliquescence also takes place; a peroxide of the metal is formed, and iodine is evolved.

Precautions necessary for preserving both Preparations.—The ioduret requires to be well secured from the influence of the atmosphere; both on account of its deliquescent property, the rapid oxydizement which the iron undergoes when deliquescence occurs, and the consequent decomposition which takes place. It is important to prevent this state of things, as the peroxide of iron is inert as a medicinal agent; whilst the free iodine, extricated during its formation, alters altogether the virtues of the medicine. This partial decomposition of the ioduret is rendered immediately apparent, on dissolving it in twenty times its weight of distilled water and filtering; instead of a permanent, clear, very pale greenish yellow, we obtain an ochre-coloured or brown solution, which soon becomes turbid, and gradually deposits an ochre-coloured completely insoluble precipitate. Much of the ioduret usually prepared both by many chemists and druggists, and also general practitioners, is of this description; and to this we may refer some of the disappointment and discrepancy of opinion of different practitioners respecting the operation of the medicine in similar cases. Even when the ioduret has been carefully prepared, and is good of its kind, it often contains a little free iodine; but it is chiefly owing to the carelessness of assistants and apprentices, in compounding prescriptions, by frequently exposing the ioduret to the air, that its properties, and consequently its medicinal powers, are impaired; hence, it is preferable to keep it in solution, or in the state of the hydriodate.

If the solution be prepared with a definite quantity of iodine, as already described, it will keep without changing its characters; but, as it is usually made by dissolving the ioduret in distilled water, it requires to be rendered neutral by the following means. Introduce into a flask, the solution of any given strength, and place in it two or three doubles of clean soft iron wire, sufficiently long to extend to the surface of the fluid; boil it for a few minutes, and then leave it at rest until the solution becomes clear, after which it may be either decanted off from the precipitate which forms, or filtered: no farther change takes place in a solution thus treated if it be kept in a blackened or a green bottle, however long it may be preserved. In this process, the wire affords iron to saturate any free iodine present in the solution, or that may have been extricated by the formation of the peroxide of iron in the ioduret; and a perfectly neutral solution being thus obtained, by the immediate conversion of the new formed ioduret into the hydriodate of the protoxide, no subsequent change takes place so long as the solution is kept secluded from the light. It is not easy to explain this influence of light in decomposing the solution of the hydriodate of iron; but several other of the metallic hydriodates are affected in the same manner by light. The best proportions for forming the medicinal solution are three grains of the dry solid ioduret to each fluid drachm of distilled water. If the water be not either distilled, or filtered rain water, perfectly free from foreign ingredients, particularly if it contain any earthy or saline carbonates, decomposition instantly takes place, iodine is extricated, and a carbonate of iron, which rapidly passes into the state of the peroxide of that metal, is precipitated.

—

20. *Physiological Effects of Hydriodate of Iron.*—Dr. Thomson, from experiments on his own person, states the following to be the physiological effects of the hydriodate of iron.

"When taken in doses of from three to five grains, the hydriodate of iron makes no sensible impression on the stomach, although it sharpens the appetite and improves the digestive function; it seems to stimulate moderately the intestinal canal through its entire length, as it opens the bowels; and whilst it produces the black colour of the alvine discharges characteristic of all the preparations of iron, it corrects their fœtor. When it does not affect the bowels, it augments the action of the kidneys, increasing the flow of urine; and if the solution be taken two or three times a-day, for several days successively, the presence of both the iodine and the iron can be readily detected in the urine. The temperature of the skin is moderately elevated, and the insensible perspiration increased. On one occasion, having taken ten grains for a dose, it almost immediately caused an uneasy sensation at the epigastrium, accompanied with nausea that continued for several hours; and a slight degree of head-ache. These symptoms were relieved by a copious stool, which was perfectly black. Two hours after swallowing the medicine, a large quantity of urine was discharged; and on being tested, it displayed the presence of both the iodine and the iron."

21. *Corrector of Opium.*—According to M. Puchelt, a German physician, the sulphate of soda is an excellent corrector of the unpleasant effects of opium, given in the proportion of a scruple to half a grain of opium. This dose may be repeated two or three times a day. In combination with Glauber's salt, opium, he says, may be administered in cases where slight plethora, local or general, prevents recourse being had to opium alone. In obstinate hæmorrhages principally, this mixture will produce the happiest effects. But if sulphate of soda prevents the congestion which opium sometimes produces, M. Puchelt says that there is another article which corrects its narcotic, without diminishing its sedative effects—this is the castor. The combination of opium and castor he considers very useful in cases of hysteria.—*Lond. Med. and Surg. Journ. May 30th*, 1835.

PRACTICE OF MEDICINE.

22. *Treatment of Hydrocephalus.* By William Stokes, M. D.—The old idea of this affection was, that it was a species of dropsy, depending on a relaxed state of the cerebral vessels, and hence the term hydrocephalus. Modern pathology has shown that the occurrence of serous effusion is a mere accidental circumstance, as it is present in one case of arachnitis, and absent in another. When it does occur, however, *it is the result of inflammatory disease*, and it is to the prevention and cure of this, that the practitioner must direct his attention. With the symptoms of this disease, I shall not take up your time, as you will find them sufficiently detailed in books; but with respect to treatment, I shall say that hydrocephalus is a disease *much more* under the influence of treatment than persons generally think. It is said that, when once effusion has taken place, the case is hopeless, and nothing can be done. This remark appears to me to be unnecessary, for there is no symptom from which you can venture to assert that *effusion* has set it. You may, from the inflammatory state of the brain, have delirium, coma, deafness, blindness, and paralysis, without any effusion of serum, and in many cases life has been saved, even after the appearance of all these symptoms.

This term *effusion* is one of the bugbears of medicine. Many patients are lost from the prevalence of false ideas connected with this subject; for as soon as *effusion* is supposed to have set in, the efforts of the practitioner are given up. Hundreds of patients die of bronchitis and pneumonia, in whom life might be saved if the symptoms of *effusion* had been treated for those of inflammation; and so it is with respect to the brain. The effusion is not the disease; it is not even a constant result of the disease. We have no certain means of ascertaining its existence; and we know, that, by a persistance in antiphlogistic treatment, life may be often saved, even after all the supposed symptoms have occurred.

Gentlemen, take this with you as a rule in medicine,—always to keep your eye more upon the causes than the effects of disease.